

(12) **United States Patent**  
**Osman**

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(54) **MAGNETIC TRACKING OF GLOVE FINGERTIPS WITH PERIPHERAL DEVICES**

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**A63F 13/428** (2014.09); **G06F 3/013**  
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(58) **Field of Classification Search**

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See application file for complete search history.

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(57)

**ABSTRACT**

A method is provided, including: activating a plurality of  
glove emitters positioned on a glove interface object; using  
a plurality of proximity sensors positioned at fingertip  
portions of the glove interface object to determine a prox-  
imity of the fingertip portions to the glove emitters; in  
response to determining a location of the glove interface  
object within a predefined distance of a peripheral device,  
activating a plurality of peripheral emitters positioned at the  
peripheral device, and transitioning, from using the prox-  
imity sensors to determine the proximity of the fingertip  
portions to the glove emitters, to using the proximity sensors  
to determine a proximity of the fingertip portions to the  
peripheral emitters.

**20 Claims, 15 Drawing Sheets**

